Application No. 10/567,342 Docket No.: DAD-0020

Amendment dated November 21, 2008 Reply to Office Action of June 3, 2008

AMENDMENTS TO THE CLAIMS

- 1. (Currently amended) A control circuit for diode based RF circuit comprising two or more at least one analog commutating devices connected in tandem having a plurality of -digital control lines, a plurality of selectable poles and at one common pole, the digital control lines being connected to a digital data generator and the selectable poles and at least one common pole being connected to the control terminal(s) of the diode(s) of the RF circuit through a network of resistors of differing values and a potential divider and a power supply or voltage source or a network of potential dividers of differing outputs and a power supply or voltage source, the analog commutating device establishing an internal coupling between the common pole and one of the selectable poles depending upon the digital value generated by the digital data generator and appearing at the digital control lines.
- 2. (Currently amended) A control circuit as claimed in claim 1, wherein comprising two analog commutating devices connected in tandem, the digital control lines of the two analog commutating devices being connected to the digital data generator, each of the selectable poles of the two analog commutating devices except one being connected to the control terminal(s) of the diode(s) of the RF circuit through a-resistors, the resistors being of differing values and the common pole of the two analog commutating devices being connected to the output of a potential divider comprising a pair of resistors of differing values connected in series, one of the resistors being connected to the power supply or voltage source and the other being earthed.
- 3. (Currently amended) A control circuit as claimed in claim 1, wherein comprising two analog commutating devices connected in tandem, the digital control lines of the two analog commutating devices being connected to the digital data generator, the selectable poles of the two analog commutating devices except one being connected to the outputs of a-the network of potential dividers each comprising a pair of resistors of differing values connected in series, one of the resistors being connected to the power supply or voltage source and the other being earthed and the common pole of the two analog commutating devices being connected to the control terminal(s) of the diode(s) of the RF circuit.

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- 4. (Previously Presented) A control circuit as claimed in claim 1, where the digital data generator is a four bit data generator.
- 5. (Previously Presented) A control circuit as claimed in claim 1, wherein each analog commutating device is an analog multiplexer.
- 6. (Original) A control circuit as claimed in claim 5, wherein the analog multiplexer comprises four digital control lines and eight selectable poles.
- 7. (Previously presented) A control circuit for diode based RF circuit comprising at least one analog commutating device having a plurality of -digital control lines, a plurality of selectable poles and at one common pole, the digital control lines being connected to a digital data generator and the selectable poles and at least one common pole being connected to the control terminal(s) of the diode(s) of the RF circuit through a network of resistors of differing values and a potential divider and a power supply or voltage source or a network of potential dividers of differing outputs and a power supply or voltage source, the analog commutating device establishing an internal coupling between the common pole and one of the selectable poles depending upon the digital value generated by the digital data generator and appearing at the digital control lines, wherein each analog commutating device is an analog multiplexer and wherein the analog multiplexer comprises four digital control lines and eight selectable poles.
- 8. (Previously presented) A control circuit as claimed in claim 1 comprising two analog commutating devices connected in tandem, the digital control lines of the two analog commutating devices being connected to the digital data generator, each of the selectable poles of the two analog commutating devices except one being connected to the control terminal(s) of the diode(s) of the RF circuit through a resistors, the resistors being of differing values and the common pole of the two analog commutating devices being connected to the output of a potential divider comprising a pair

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of resistors of differing values connected in series, one of the resistors being connected to the power

supply or voltage source and the other being earthed.

9. (Previously presented) A control circuit as claimed in claim 1 comprising two analog

commutating devices connected in tandem, the digital control lines of the two analog commutating

devices being connected to the digital data generator, the selectable poles of the two analog

commutating devices except one being connected to the outputs of a network of potential dividers

each comprising a pair of resistors of differing values connected in series, one of the resistors being

connected to the power supply or voltage source and the other being earthed and the common pole

of the two analog commutating devices being connected to the control terminal(s) of the diode(s) of

the RF circuit.

10. (Previously presented) A control circuit as claimed in claim 1, where the digital data generator

is a four bit data generator.

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